

**VTE®**

# SERIES 20 / SERIES FS20

## 1 Piece Reduced Port Ball Valves



Flow-Tek's Series S20 ball valves offer a compact, one piece body design. The one piece body supplies maximum structural strength while minimizing the number of potential leak paths.

These valves feature quarter turn operation, bottom entry blowout proof stems and low operating torque. Live-loaded, self-adjusting stem seals automatically adjust to compensate for changes in wear and temperature. Series S20 valves are available in both standard and fire safe versions.

### FS20 Fire Safe - Certified to API 607

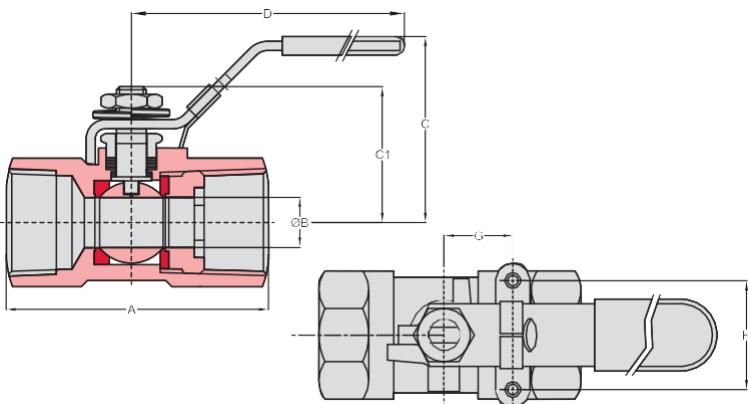
Series FS20 valves have been thoroughly fire tested and meet these latest standards. Additionally, the adjustable graphite stem packing provides reduced torque and a very high cycle life.

Other features include replaceable seats and seals, stainless steel safety latch handles and high quality investment cast bodies. All bodies are marked with a foundry heat number for full traceability. An optional oval handle is available.



Optional Fire Safe, API 607 Certified

Size	Pressure Rating	Steam Rating	Temperature Range	End Connections	Body Material
1/4" to 2" 8mm to 50mm	2000 psi WOG 138 bar	150 psi WSP 10.3 bar	-50°F to +450°F -46°C to +232°C	Threaded - NPT	Stainless Steel



Dimensions (inch)

Size in	A	ØB	C	C1	D	G	H	S	Cv	Weight lb
1/4	2.32	0.36	1.57	1.18	3.59	.49	1.12	1.02	5.5	0.198
3/8	2.32	0.36	1.57	1.18	3.59	.49	1.12	1.02	5.5	0.309
1/2	2.64	0.36	1.57	1.18	3.59	.49	1.12	1.02	5.5	0.595
3/4	2.80	0.49	1.73	1.38	4.06	.49	1.12	1.26	10	0.705
1	3.31	0.60	2.36	1.57	4.37	0.83	1.37	1.56	16.3	1.389
1-1/4	3.70	0.79	2.56	1.96	4.96	.83	1.37	1.97	30	2.667
1-1/2	3.94	0.98	2.67	2.36	4.96	0.89	1.37	2.17	37	2.998
2	4.49	1.26	3.11	268	6.06	0.92	1.5	2.76	60	3.946

Dimensions (mm)

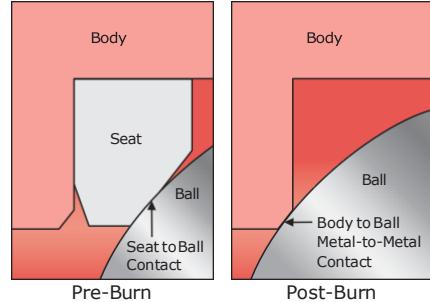
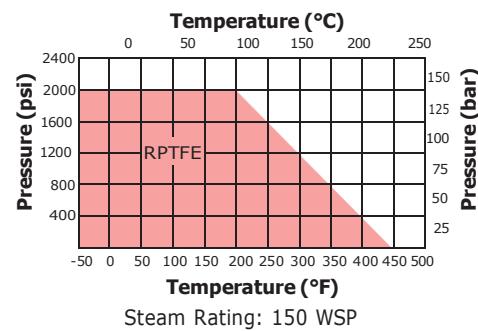
Size mm	A	ØB	C	C1	D	G	H	S	Cv	Weight Kg
8	59	9.2	40	30	91	12.5	28.5	26	5.5	.09
10	59	9.2	40	30	91	12.5	28.5	26	5.5	.14
15	67	9.2	40	30	91	12.5	28.5	26	5.5	.27
20	71	12.5	44	35	103	12.5	28.5	32	10	.32
25	84	15	60	40	111	21	34.8	39.5	16.3	.63
32	94	20	65	50	126	21	34.8	50	30	1.21
40	100	25	68	60	126	22.5	34.8	55	37	1.36
50	114	32	79	68	154	23.5	38.1	70	60	1.79

All Series S20 valves comply with NACE MR0175.

All valves are tested in accordance with: MSS-SP 72.

Vacuum Service to: 29 inches Hg. gauge.

## PRESSURE/TEMPERATURE

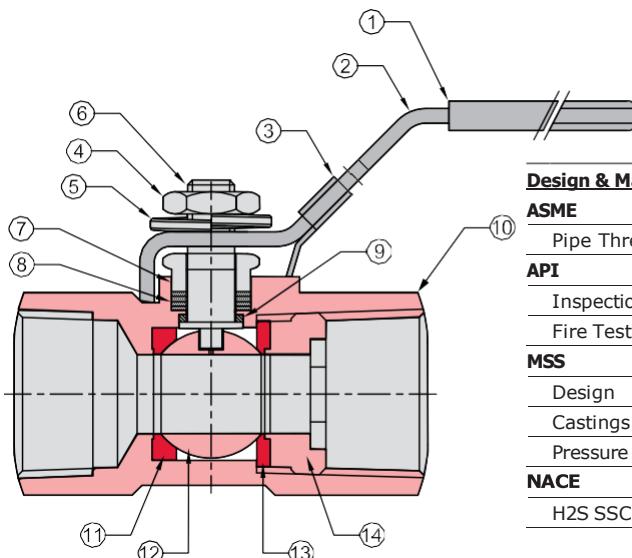


**Fire Safe:** Flow-Tek's Model FS20 valves with graphite stem packing and body seal are certified fire safe. In the event of a fire, after heat destroys the primary resilient seat, the ball makes contact with the secondary metal seat, forming a secure seal. The graphite body seal prevents external leakage. The graphite live-loaded stem packing prevents stem leakage. All valves have anti-static devices as standard, grounding ball and stem to body.

## COMPONENTS & MATERIALS STANDARD S20

Item	Description	Material	Qty.
1	Handle Sleeve	PVC Vinyl	1
2	Handle	304	1
3	Locking	304	1
4	Stem Nut	304	1
5	Spring Washer	304	1
6	Stem	304/316	1
7	Gland Nut	304	1
8	Stem Packing	RPTFE	1
9	Thrust Washer	RPTFE	1
10	Body	CF8/CF8M	1
11	Seat A	RPTFE	1
12	Ball	CF8/CF8M	1
13	Seat B	FPTFE	1
14	Insert	304/316	1
15	Secure Pin	304	1

\*Fire Safe valves / Non Fire Safe valves.



## Design & Manufacturing Standards

### ASME

Pipe Threads	B1.20.1
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### API

Inspection/Testing	598
Fire Testing	607

### MSS

Design	SP110
Castings	SP55
Pressure Testing	SP61

### NACE

H2S SSC	MR0175
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